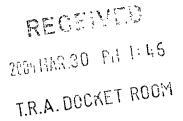


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March 29, 2004

The Honorable Deborah Taylor Tate Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243-0505

> RE: Docket # 04-00042- Disaster Recovery Plan For Frontier & KMC Interconnection Agreement

Dear Chairman Tate

Enclosed are an original and 14 copies of Frontier's Disaster Recovery Plan. This plan was inadvertently omitted from our initial filing in the above-referenced docket.

If you have any questions, please call me at 304-325-1216

Sincerely,

J. Michael Swatts

State Government Affairs Director - South

**Enclosure** 



# **Disaster Recovery Plan**

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#### 1.0 PURPOSE

In the unlikely event of a disaster occurring that affects Citizen Communications long-term ability to deliver traffic to a Competitive Local Exchange Carrier (CLEC), general procedures have been developed to hasten the recovery process. Since each location is different and could be affected by an assortment of potential problems a detailed recovery plan is impractical. However, in the process of reviewing recovery activities for specific locations, some basic procedures emerge that appear to be common in most cases

These general procedures should apply to any disaster that affects the delivery of traffic for an extended time period. Each CLEC will be given the same consideration during an outage and service will be restored as quickly as possible

This document will cover the basic recovery procedures that would apply to every CLEC.

## 2.0 SINGLE POINT OF CONTACT

When a problem is experienced, regardless of the severity, the Citizens Communications Network Operations Center (NOC) will observe traffic anomalies and begin monitoring the situation. Controls will be appropriately applied to insure the sanity of Citizens Communications' network; and, in the event that a switch or facility node is lost, the NOC will attempt to circumvent the failure using available reroutes

Citizens Communications NOC will remain in control of the restoration efforts until the problem has been identified as being a long-term outage. At that time, the NOC will contact Citizens Communications Restoration Control Center (RCC) and relinquish control of the recovery efforts. Even though the RCC may take charge of the situation, the NOC will continue to monitor the circumstances and restore traffic as soon as damaged network elements are revitalized.

The telephone number for the Citizens Communications Network Operations Center is 800-722-0288.

#### 3.0 IDENTIFYING THE PROBLEM

During the early stages of problem detection, the NOC will be able to tell which CLECs are affected by the catastrophe. Further analysis and/or first hand observation will determine if the disaster has affected CLEC equipment only, Citizens Communication equipment only, or a combination. The initial restoration activity will be largely determined by the equipment that is affected.

Once the nature of the disaster is determined and after verifying the cause of the problem, the NOC will initiate reroutes and/or transfers that are jointly agreed upon by the affected CLEC's Network Management Center and the Citizens Communications NOC. The type and percentage of controls used will depend upon available network capacity Controls necessary to stabilize the situation will be invoked and the NOC will attempt to re-establish as much traffic as possible

For long term outages, recovery efforts will be coordinated by the Restoration Control Center (RCC). Traffic controls will continue to be applied by the NOC until facilities are re-established.

As equipment is made available for service, the RCC will instruct the NOC to begin removing the controls and allow traffic to resume.



#### 3.1 SITE CONTROL

In the total loss of building use scenario, what likely exists will be a smoking pile of rubble. This rubble will contain many components that could be dangerous. It could also contain any personnel on the premises at the time of the disaster. For these reasons, the local fire marshal with the assistance of the police will control the site until the building is no longer a threat to surrounding properties and the companies have secured the site from the general public

During this time, the majority owner of the building should be arranging for a demolition contractor to mobilize to the site with the primary objective of reaching the cable entrance facility for a damage assessment. The results of this assessment would then dictate immediate plans for restoration, both short term and permanent.

In a less catastrophic event, i.e., the building is still standing and the cable entrance facility is usable, the situation is more complex. Local authorities will initially control the site until the threat to adjacent property has diminished. Once the site is returned to the control of the companies, the following events should occur.

An initial assessment of the main building infrastructure systems (mechanical, electrical, fire & life safety, elevators, and others) will establish building needs. Once these needs are determined, the majority owner should lead the building restoration efforts. There may be situations where the site will not be totally restored within the confines of the building. The companies must individually determine their needs and jointly assess the cost of permanent restoration to determine the overall plan of action.

Multiple restoration trailers from each company will result in the need for designated space and installation order. This layout and control is required to maximize the amount of restoration equipment that can be placed at the site, and the priority of placements.

Care must be taken in this planning to insure other restoration efforts have logistical access to the building. Major components of telephone and building equipment will need to be removed and replaced. A priority for this equipment must also be jointly established to facilitate overall site restoration (Example. If the AC power system has sustained damage, this would be of the highest priority in order to regain power, lighting, and HVAC throughout the building.)

If the site will not accommodate the required restoration equipment, the companies would then need to quickly arrange with local authorities for street closures, rights of way or other possible options available.

#### 3.2 ENVIRONMENTAL CONCERNS

In the worse case scenario, many environmental concerns must be addressed. Along with the police and fire marshal, the state environmental protection department will be on site to monitor the situation.

Items to be concerned with in a large central office building could include:



- 1. Emergency engine fuel supply. Damage to the standby equipment and the fuel handling equipment could have created "spill" conditions that have to be handled within state and federal regulations.
- 2. Asbestos containing materials that may be spread throughout the wreckage Asbestos could be in many components of building, electrical, mechanical, outside plant distribution, and telephone systems.
- 3 Lead and acid. These materials could be present in potentially large quantities depending upon the extent of drainage to the power room.
- 4 Mercury and other regulated compounds resident in telephone equipment
- 5. Other compounds produced by the fire or heat.

Once a total loss event occurs at a large site, local authorities will control immediate clean up (water placed on the wreckage by the fire department) and site access.

At some point, the companies will become involved with local authorities in the overall planning associated with site clean up and restoration. Depending on the clean up approach taken, delays in the restoration of several hours to several days may occur.

In a less severe disaster, items listed above are more defined and can be addressed individually depending on the damage.

In each case, the majority owner should coordinate building and environmental restoration and well as maintain proper planning and site control.

# 4.0 RESTORATION CONTROL CENTER (RCC)

The Restoration Control Center will be activated in the event of a disaster. The RCC is chaired by the VP / GM Tennessee It is the VP / GMs responsibility to declare the activation of the RCC and classification of the outage.

In the event of a major service interruption, the VP / GM Tennessee will notify the RCC staff which will establish a conference bridge to be used for the communication link for the emergency restoral.

The RCC staff will assess the service outage or natural disaster and direct the appropriate staff functional task force groups to provide the necessary personnel and supplies based on review of outage reports, nature of outage and restoral estimate times.

The RCC will continuously monitor the progress and needs of functional work groups which will in turn issue information to the various state and local government agencies as to the status of restoring service

The Tennessee RCC includes the following departments and is supported by the functional staff as indicated below.



- 1 Field Operations
- 2. Network Operations Center (NOC)
- 3 Engineering (Outside Plant)
- 4. Administration Support / Customer Contact
- 5. Public and External Affairs

The RCC is supported by the functional staff from the following departments.

- 1. Human Resources
- 2 Supply
- 3. Security
- 4. Building / Vehicles / Energy
- 5. Planning
- 6. External / Public Affairs
- 7. Engineering OSP
- 8 Finance
- 9. Field Operations Supervisors
- 10. Sales / Business Services

Annually, the RCC will meet to review the Citizens Telecommunications Company of Tennessee Emergency Program to ensure its functionally is in accordance with current Citizens Policies and Practices

Each member of the RCC will have a Citizens Communications call out manual for the state and their area of responsibility that will contain the following:

- Names and telephone numbers of their support personnel.
- 2 Names of contacts for materials.
- 3 List of emergency equipment locations such as generators
- 4. Any specialized information needed for them to perform their mission

## 5.0 RECOVERY PROCEDURES

The nature and security of any disaster will influence the recovery procedures. One crucial factor in determining how Citizens Communications will proceed with restoration is whether or not Citizens Communications' equipment is incapacitated. Regardless of whose equipment is out of service, Citizens Communications will move as quickly as possible to aid with service recovery, however, the approach that will be taken may differ depending upon the location of the problem.

#### **5.1 CLEC OUTAGE**

For a problem limited to One CLEC (or a building with multiple CLECs), Citizens Communications has several options available for restoring service quickly. For those CLECs that have agreements with other CLECs, Citizens Communications can immediately start directing traffic to a provisional CLEC for completion. This alternative is dependent upon Citizens Communications having concurrence from the affected CLECs.



Whether or not the affected CLECs have requested a traffic transfer to another CLEC will not impact Citizens Communications' resolve to re-establish traffic to the original destination as quickly as possible.

## 5.2 CITIZENS COMMUNICATIONS OUTAGE

Because Citizens Communications' equipment has varying degrees of impact on the service provided to the CLECs, restoring service from damaged Citizens Communications equipment is different. The outage will probably impact a number of Carriers simultaneously. However, the RCC will be able to initiate immediate actions to correct the problem.

A disaster involving any of Citizens Communications' equipment locations could impact the CLECs, some more than others. A disaster at a Central Office (CO) would only impact the delivery of traffic to and from that one location, but the incident could affect many Carriers. If the Central Office is a Serving Wire Center (SWC), then traffic from the entire area to those Carriers served from that switch would also be impacted. If the switch functions as an Access Tandem, or there is a tandem in the building, traffic from every CO to every CLEC could be interrupted. A disaster that destroys a facility hub could disrupt various traffic flows, even though the switching equipment may be unaffected.

The NOC would be the first group to observe a problem involving Citizens Communications' equipment. Shortly after a disaster, the NOC will begin applying controls and finding re-routes for the completion of as much traffic as possible. These reroutes may involve delivering traffic to alternate Carriers upon receiving approval from the CLECs involved. In some cases, changes in translations will be required. If the outage is caused by the destruction of equipment, then the RCC will assume control of the restoration

## 5.2.1 Loss of a Central Office

When Citizens Communications loses a Central Office, the RCC will

- a) Place specialists and emergency equipment on notice,
- b) Inventory the damage to determine what equipment and /or functions are lost;
- c) Move containerized emergency equipment and facility equipment to the stricken area, if necessary,
- d) Begin reconnecting service for Hospitals, Police, and other emergency agencies; and
- e) Begin restoring service to CLECs and other customers

## 5.2.2 Loss of a Central Office with Serving Wire Center Functions

The loss of a Central Office that also serves as a Serving Wire Center (SWC) will be restored as described in section 5.2.1.

## 5.2.3 Loss of a Central Office with Tandem Functions

When Citizens Communications loses a Central Office building that serves as an Access Tandem and as a SWC, the RCC will



- a) Place specialists and emergency equipment on notice,
- b) Inventory the damage to determine what equipment and/or functions are lost,
- c) Move containerized emergency equipment and facility equipment to the stricken area, if necessary;
- d) Begin reconnecting service for Hospitals, Police, and other emergency agencies;
- e) Re-direct as much traffic as possible to the alternate access tandem (if available) for delivery to those CLECs utilizing a different location as a SWC,
- f) Begin aggregating traffic to a location near the damaged building From this location, begin reestablishing trunk groups to the CLECs for the delivery of traffic normally found on the direct trunk groups (This aggregation point may be the alternate access tandem location or another CO on a primary facility route.)
- g) Begin restoring service to CLECs and other customers

## 5.2.4 Loss of a Facility Hub

In the event that Citizens Communications loses a facility hub, the recovery process is much the same as above. Once the NOC has observed the problem and administered the appropriate controls, the RCC will assume authority for the repairs. The recovery effort will include

- a) Placing specialists and emergency equipment on notice,
- b) Inventorying the damage to determine what equipment and/or functions are lost;
- c) Moving containerized emergency equipment to the stricken area, if necessary,
- d) Reconnecting service for Hospitals, Police, and other emergency agencies, and
- e) Restoring service to CLEC; and other customers. If necessary, Citizens Communications will aggregate the traffic at another location and build temporary facilities, when available. This alternative would be viable for a location that is destroyed and building repairs are required.

# 5.3 COMBINED OUTAGE (CLEC AND CITIZENS COMMUNICAITONS' EQUIPMENT)

In some instances, a disaster may impact Citizens Communications' equipment as well as the CLECs'. This situation will be handled in much the same way as described in section 5.2.3 Since Citizen Communications and the CLECs will be utilizing temporary equipment, close coordination will be required.

#### 6.0 T1 IDENTIFICATION PROCEDURES

During the restoration of service after a disaster, Citizens Communications may be forced to aggregate traffic for delivery to a CLEC During this process, T1 traffic may be consolidated onto DS3s and may become unidentifiable to the Carrier. Because resources will be limited, Citizens Communications may be forced to "package" this traffic entirely differently then normally received by the CLECs. Therefore, a method for identifying the T1 traffic on the DS3s and



providing the information to the Carriers is required.

#### 7.0 ACRONYMS

CO Central Office (Citizens Communications)
DS3 Facility that carries 28 T1s (672 Circuits)

CLEC Competitive Local Exchange Carrier

NOC Network Operations Center

RCC Restoration Control Center

SWC Serving Wire Center (Citizens Communications switch)

T1 Facility that carries 24 circuits

## 8.0 HURRICANE INFORMATION

During a hurricane, Citizens Communications will make every effort to keep CLECs updated on the status of our network. Information centers will be set up throughout Citizens Communications. These centers are not intended to be used for escalations, but rather to keep the CLEC informed or network related issues, area damages, and dispatch conditions, etc.

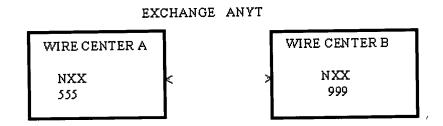
# 9.0 CITIZENS COMMUNICATIONS DISASTER MANAGEMENT PLAN

Citizens Communications maintenance centers have geographical and redundant communication capabilities. In the event of a disaster removing any maintenance center from service another geographical center would assume maintenance responsibilities. The contact numbers will not change and the transfer will be transparent to the CLEC.

# **CHAPTER 13.0 - Special Service Offerings**

# 13.2 Foreign Central Office

Foreign central office service allows a subscriber, within one exchange, to draw dial tone from another central office within the same exchange Subscribers may choose this service for a variety of reasons, e.g., a prestigious NXX or a business moves and wants to keep the same telephone number, etc.



Example:

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The subscriber's address is within the geographical area served by Wire Center A. The subscriber could have an address of 123 Main St (in Wire Center A) with a NXX of 999 (in Wire Center B).

When the subscriber's address processes through the E911 database, the address is MSAG valid and will therefore mechanically load with the appropriate ESN, provided the county served by Wire Center B has purchased E911 service.

If, in the above example, Wire Center B is in an area that is not part of the E911 system, the subscriber would not be a part of the E911 database.

revious next

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Last Updated January 14, 2004

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